

## AMENDMENTS

### Amendments to the Specification:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Please replace the abstract with the following amended abstract:

In accordance with the present invention, a loop extender for improving the transmission of ~~DSL~~ digital subscriber line (DSL) signals over a local loop is disclosed. The loop extender includes selectable line termination and equalization (SLTE) DSL amplification circuitry capacitively coupled to the local loop via bypass relay switches, a ~~POTS~~ plain old telephone service (POTS) loading coil adapted to be coupled to the local loop for improving transmission of POTS band signals over the local loop, and a diagnostic/control unit (DCU) coupled to the local loop for receiving and processing control signals from a central office, coupled to the bypass relay switches via a bypass relay for controlling the bypass relay switches, and coupled to the SLTE DSL amplification circuitry via a plurality of switch control lines for controlling the SLTE DSL amplification circuitry.

Please replace paragraph [0001] with the following amended paragraph:

[0001] This application is related to, and claims the benefit of, U.S. Provisional Patent Application No. 60/266,953, filed on February 6, 2001 and entitled "xDSL Repeater with Selectable Line Termination and Equalization." This application also relates to commonly assigned U.S. Patent Application No. 09/569,470, filed on May 12, 2000, now abandoned, and entitled "DSL Repeater," U.S. Patent Application No. 09/610,788, filed on July 6, 2000 and entitled "DSP-Based Repeater for DSL Signals," U.S. Patent Application No. 09/670,475, filed on September 26, 2000 and entitled "Load Coil And DSL Repeater Including Same," U.S. Patent Application No. [[\_\_\_\_]] 10/072,091, filed on [[\_\_\_\_]] February 6, 2002, and entitled "Loop Extender with Communications, Control, and Diagnostics," and U.S. Patent Application No.

[[\_\_\_\_]]10/071,980, filed on [[\_\_\_\_]]February 6, 2002 and entitled "Line Powered Loop Extender with Communications, Control, and Diagnostics." The disclosures of these related applications are hereby incorporated by reference.

Please replace paragraph [0027] with the following amended paragraph:

**[0027]** Filters 302 and 312, amplifying elements 304 and 314, and complex impedances 306 and 307 are disposed between transformers 322 and 324. Amplifying elements 304 and 314 may comprise amplifiers or amplifying equalizers. More details regarding the functionality and operational characteristics of filters 302 and 312, amplifying elements 304 and 314, complex impedances 306 and 307, and transformers 322 and 324 are disclosed in U.S. Patent Application No. 09/569,470, filed on May 12, 2000 and entitled "DSL Repeater."

Please replace paragraph [0048] with the following amended paragraph:

**[0048]** VF modem 610 receives control signals from central office 202 and sends response signals and data to central office 202 via local loop 214. DCP 612 processes the control signals received from central office 202 via VF modem 610, sends the processed control signals to AMACD 614, receives data from AMADC 614, analyzes some or all of the received data, and sends the analyzed and unanalyzed data to central office 202 via VF modem 610. AMADC 614 controls the state of switches 510, 511, 512, and 513 via switch control lines 516, 518, 520, and 522 respectively upon receiving the processed control signals from DCP 612. AMADC 614 may also sample DSL signal data at locations (not shown) in the SLTE DSL amplification circuitry 505 via a plurality of diagnostic lines 614, convert the sampled signal data to analog data, and send the converted signal data to DCP 612 for analysis. The sampling of DSL signal data via diagnostic lines 614 and the communications, control, and diagnostics functionality of loop extender 224 and central office 202 is disclosed in ~~a patent application~~ U.S. Patent Application No. 10/072,091 entitled "Loop Extender with Communications, Control and

Diagnostics” filed on [[\_\_\_\_\_]February 6, 2002, the disclosure of which is hereby incorporated by reference.